

**CLAIMS**

What is claimed is:

1. A method of effecting a substitute for a data communication target protocol in communications between a host interface device and a client interface device, the method comprising:

5 a) selecting a first protocol that is supported by the client, such that a first predetermined data and control signal sequence conveyed to the client from the host predictably elicits a response from the client that accords with the supported protocol, wherein the predetermined data and control signal sequence is initiated by the host to invoke the supported protocol;

b) selecting a different second protocol that is unsupported by the client in that the host does not have access to a unique data and control sequence that will predictably elicit a response, required by such unsupported protocol, when conveyed from the host to the client;

10 c) determining a need for invocation of the second protocol to effect a particular function in the host that is not explicitly effected by the supported protocol;

d) conveying the first predetermined data and control signal sequence from the host to the client;

e) receiving a response to the host from the client that accords with the supported protocol; and

15 f) interpreting the response, within the host, to approximately effect the particular function in the host.

2. The method of Claim 1, wherein the first protocol is a data retransmission protocol in which the client retransmits a block of data as a predictable response to an indication of transmission error provided by the host.

3. The method of Claim 2, wherein the different second protocol is a flow control protocol in which the host causes the client to temporarily suspend new data transmissions.

4. The method of Claim 3, wherein step c) includes determining a need to interrupt data flow despite an absence of recognizing a transmission error, and step d) includes conveying an indication of transmission error from the host to the client.

5. The method of Claim 4, further comprising repetitively performing step (d) to effect a plurality of temporally contiguous invocations of the first protocol.

6. The method of Claim 1, wherein the different second protocol is a flow control protocol in which the host causes the client to temporarily suspend new data transmissions.

7. The method of Claim 6, further comprising repetitively performing step (d) to effect a plurality of temporally contiguous invocations of the first protocol.

8. A host interface device apparatus for controlling data transfers between the host interface device and a client interface device, comprising:

a) host logic configured to cause transmission to the client of a control data sequence predetermined to invoke a first data communication protocol response from the client;

5 b) a triggering host signal indicating a need for invocation of a different second data communication protocol from the client; and

c) host logic configured to cause transmission to the client of the predetermined data sequence to invoke the first data communication protocol response from the client in response to both of

i) a host need to invoke the first protocol, and

10 ii) the triggering host signal for the second protocol in an absence of (c)(i).

9. The apparatus of Claim 8, wherein the predetermined data sequence caused by host logic (c) is substantially identical whether caused in response to condition (c)(i) or in response to condition (c)(ii).

10. The apparatus of Claim 8, further comprising:

- d) a bidirectional data connection I/O for coupling the host to the client; and  
wherein the host logic (a) is further configured to assert an error bit on the bidirectional I/O connection to invoke the first data communication protocol response from the client.

11. The apparatus of Claim 8, wherein the second protocol is a flow control protocol in which the client temporarily suspends transmission of new data to the host.

12. The apparatus of Claim 11, wherein the first protocol is a retransmission protocol in which the client retransmits a previously transmitted data sequence to the host.

13. The apparatus of Claim 12, further comprising a host received data error determination block configured to identify discrepant received data as erroneous, and to indicate a host need to invoke the first protocol in response to receipt of such discrepant data.

14. The apparatus of Claim 13, wherein the triggering host signal (c)(ii) is a buffer not ready signal.